SALTYKOV, R.A.; REZEPOV, F.F.; ZEMSKOV, Ye.M.

Discussion of the rate of immunological response to revaccination with anatoxins. Zhur. mikrobiol., epid. i immun. 40 no.3:111-114 Mr '63. (MIRA 17:2)

SALTYKOV, R.A.; KREMIEV, G.I.; ZEMSKOV, Ye.M.

Associated immunization with live and chemical vaccines in experiments. Report No.2: Mechanism of the stimulation of antitoxin production by live EB vaccine. Zhur. mikrobiol., epid. i immun. 33 no.2:28-32 F '62. (MIRA 15:3)
(IMMUNITY)
(PLAGUE—PREVENTIVE INOCULATION)
(TOXINS AND ANTITOXINS)

SALTYKOV, R.A.; ZEMSKOV, Ye.M.; MILYUTIN, V.N.

Effect of toxins of pathogenic anaerobes on tissue cultures.
Biul. eksp. biol. i med. 52 no.12:43-47 D '61. (MIRA 14:12)

1. Predstavlena deystvitel'nym chlenom AMN SSSR P.F.Zdrodovskim.
(TOXINS AND ANTITOXINS) (TISSUE CULTURE)

SALTYKOV, R.A.; REZEPOV, F.F.; ZEMSKOV, Ye.M. (Moskva)

On the rate of the development of immunity following revaccination with anaerobic anatoxins. Biul.eksp.biol.i med. 47 no.8:81-84 Ag '59. (MIRA 12:11)

1. Predstavlena deystvitel'nym chlenom AMN SSSR P.F. Zdrodovskim.
(CLOSTRIDIUM immunol.)
(VACCINES)

ACC NR: AT6020237 (N) SOURCE CODE: UR/2589/65/000/077/0072/0075

AUTHORS: Zemskov, Ye. M.; Sachkov, V. I.

ORG: none

TITLE: An experiment on the use of cesium frequency as a time standard

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta, no. 77(137), 1965. Issledovaniya v oblasti izmereniya vremeni i chastoty (Research in the field of time and frequency measurement), 72-75

TOPIC TAGS: cesium, quartz clock, frequency divider

ABSTRACT: The performance of a cesium atom beam resonator was studied. The resonator was constructed after the method of N. Ramsey (Molekulyarnyye puchki, IL, M., 1960), and a schematic of the installation is presented. The performance of the resonator was compared with two molecular generators (working on lines I = 3 and K = 3 respectively) and with the signals of the British National Physical Laboratory radio station GBR (see Fig. 1). It was found that the constructed cesium resonator could be used to determine the frequency of a standard quartz generator with an accuracy of 2 x 10^{-10}.

UDC: 539.184.26:546.36:529.781

Card 1/2

ACC NR: AT6020237

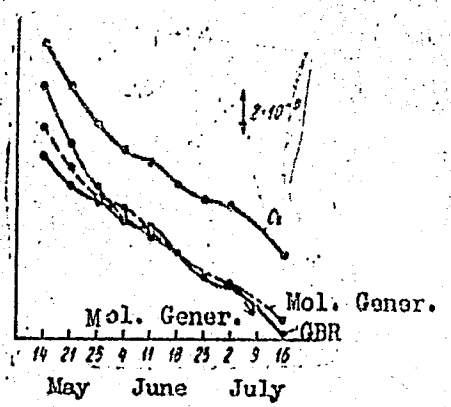

Fig. 1. Comparison of the cesium timed quartz generator with molecular generators and with standard frequency signals of radio station GBR

Orig. art. has: 4 graphs and 3 equations.

SUB CODE: 14, 09, 11/ SUBM DATE: --Feb62/ ORIG REF: 003/ OTH REF: 004

Card 2/2

ACC NR: AP7002707 (A) SOURCE CODE: UR/0115/66/000/012/0051/0053

AUTHOR: Yermakov, V. I.; Zemskov, Ye. M.; Sachkov, V. I.

ORG: none

TITLE: Some relations characterizing the beam path in a cesium frequency standard

SOURCE: Izmeritel'naya tekhnika, no. 12, 1966, 51-53

TOPIC TAGS: frequency standard, cesium, frequency control, atomic clock

ABSTRACT: Early authors' experiments with the cesium atomic-beam frequency standard involved a collimating diaphragm and were found to be unwieldy. Hence, further experiments were conducted without collimators, their functions being performed by beam slits cut in the resonators. Formulas are deduced which impose certain conditions on the widths of the slits in the resonators, source, and detector and also on the field gradient of the deflecting magnets. These conditions make possible successful operation of the frequency standard not equipped with the collimating diaphragm and having symmetrical beam deflection. These relations are derived: detector slit width

$$b_н + \frac{l_0}{l_1 + l_2 + l_3 + l_4} b_р < \frac{4M_{эфф}\nabla B}{3m\alpha^2} l_3 \left(\frac{l_3}{2} + l_4\right)$$

$$b_0 = 2b_н + b_н.$$

$$b_р < \left[\frac{4M_{эфф}\nabla B}{3m\alpha^2} l_3 \left(\frac{l_3}{2} + l_4\right) - b_н\right] \frac{l_1 + l_2 + l_3 + l_4}{l_0},$$

Card 1/2 UDC: 621.373.(083.76):546.36

ACC NR: AP7002707

The beam can be limited either by the first (from the source) or by the second resonator. If $b_n + b_p < \frac{a l_2}{v^2}(2l_1 + l_2)$, the first resonator places the limitation; if $b_n + b_p > \frac{a l_2}{v^2}(2l_1 + l_2)$, the scond. Here, b_n - source slit width and b_p - resonator slit width. Actually, both resonator slits act simultaneously as the beam contains atoms that have different speeds. Orig. art. has: 2 figures and 24 formulas.

SUB CODE: 09, 20 / SUBM DATE: 21Jul66 / ORIG REF: 000 / OTH REF: 001

Card 2/2

ZEMSKOV, Ye.M.

Effect of the length and density of an atomic beam on the characteristics of the atomic-ray frequency standard. Izm. tekh. no.1:29-32 Ja '65. (MIRA 18:4)

SALTYKOV, R.A.; ZEMSKOV, Ye.M.

Combined immunization with living and chemical vaccines in an experiment. Report No. 1: Combined vaccination with anaerobic sorbed anatoxins and living plague and tularemia vaccines. Zhur. mikrobiol. epid. i immun. 31 no. 4:60-64 Ap '60. (MIRA 13:10)
(PLAGUE) (TULAREMIA)

ZEMSKOV, Ye.M.

Determination of the activity of toxins of Clostridium perfringens and Cleodematiens in tissue cultures. Zhur. mikrobiol., epid. i immun. 40 no.1:69-73'63. (MIRA 16:10)

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IGONIN, A.M.; ZEMSKOV, Ye.M.

Morphology of the active and inhibitory phases of immunity in guinea pigs immunized with heated vaccine from the paratyphoid A bacillus. Biul. eksp. biol. i med. 52 no.11:80-84 N '61. (MIRA 15:3)

1. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

(SALMONELLA PARATYPHI)
(VACCINES) (IMMUNITY)

SALTYKOV, R.A.; ZEMSKOV, Ye.M.; NIKONOV, I.V.

Experience in sublimation drying of concentrated sorbed anatoxins. Zhur.mikrobiol.epid.i immun. 32 no.1:117-121 Ja '61. (MIRA 14:6)

(TETANUS) (TOXINS AND ANTITOXINS)

ZEMSKOV, YE. M.

51-2-12/15

AUTHORS: Zemskov, Ye. M. and Veselago, V.G.

TITLE: The Stark effect in the rotational spectra of the symmetrical-top molecules in the presence of a quadrupole bond (the $\mu\mathcal{E} \approx eQq$ case). (Shtark-effekt vo vrashchatel'nykh spektrakh molekyl tipa asimmetrichnogo volchka pri nalichii kvadrupol'noy svyazi (sluchay $\mu\mathcal{E} \approx eQq$).

PERIODICAL: "Optika i Spektroskopiya" (Optics and Spectroscopy) 1957, Vol.3, No.2, pp.183-186 (U.S.S.R.)

ABSTRACT: Theoretical paper. The Stark splitting is used to study the rotational spectra of the asymmetrical-top molecules. If such a molecule contains an atom whose nucleus possesses a quadrupole moment the rotational spectrum becomes very complex. The theory of the simultaneous Stark and quadrupole interaction in rotational spectra was given in /1, 2/ only for the case when one of these interactions is much larger than the other. This paper deals with the case when both interactions are of the same order, i.e. $\mu\mathcal{E} \approx eQq$. The total Hamiltonian is taken to be $H = H_0 + H_S + H_Q$, where H_0, H_S, H_Q are the Hamiltonians of a free rotating molecule, the Stark interaction and the quadrupole interaction respectively. It is assumed that $(H_S + H_Q) \ll H_0$. The case of $J = 1$ is treated in more detail and the relative intensities of the sub-levels for the $J = 0 \rightarrow J = 1$ are given. There are three

Card 1/2

UTKIN, V.V.; ZEMSKOVA, Z.S.

Pathohistological study of the healing processes in experimental tuberculosis under the influence of cycloserine. Probl. tub. no.1: 64-70 '63. (MIRA 16:5)

1. Iz Pervogo terapevticheskogo otdeleniya (zav.- deystvitel'nyy chlen AMN SSSR prof. N.A.Shmelov) i patomorfologicheskogo otdeleniya (zav.-prof. V.I.Puzik) TSentral'nogo instituta tuberkuleza Ministerstva zdravookhraneniya SSSR, Moskva.
(TUBERCULOSIS) (CYCLOSERINE)

BALYAKINA, M.V.; ZHDANOVICH, Ye.S.; ZEMSKOVA, A.G.; PREOBRAZHENSKIY, N.A.

Synthetic research in the field of vitamins of the group B_6. Part 3: Synthesis of pyridoxine derivatives containing residues of higher aliphatic acids. Zhur.ob.khim. 32 no.4:1172-1175 Ap '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Pyridoxol)

LULOVA, N.I.; TARASOV, A.I.; KUDRYAVTSEVA, N.A.; ZEMSKOVA, Ye.I.

Chromatographic method of analysis of gases of petroleum refining. Trudy Kom.anal.khim. 13:238-246 '63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazu i polucheniyu zhidkogo topliva.
(Petroleum refining) (Gas chromatography)

BIDZHIYEV, R.A.; ZEMSKOVA, O.K.; NEVYAZHSKIY, I.I.; SHIROKOVA, I.Ya.

New discoveries of Tertiary flora in central Yakutia. Trudy VAGT no.2:177-179 '56. (MLRA 10:5)
(Yakutia--Paleobotany, Stratigraphic)

TOKAREVA, L.G.; MIKHAYLOV, N.V.; POTEMKINA, Z.I.; KOVALEVA, M.V.; BORIK, A.G.; ZEMSKOVA, G.N.; ZOTOVA, Ya.E.

Stabilization of polyamide fibers. Khim.volok. no.3:15-21 '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Tokareva, Mikhaylov, Potemkina, Kovaleva). 2. Klinskiy kombinat (for Borik, Zemskova). 3. Mytishchinskiy zavod (for Zotova).

(Textile fibers, Synthetic)

KUCHEROV, V.F.; GRIGOR'YEVA, N.Ya.; ZEMSKOVA, I.I.

Conjugation factors in cyclic systems. Part 2: Isomerization of double bonds in dimethyl- $\Delta^{1,4}$ -cyclohexadiene-1,2-dicarboxylic acids. Zhur. ob. khim. 31 no. 2:457-469 F '61. (MIRA 14:2)

1. Institut organicheskoy khimii AN SSSR.
(Cyclohexadienedicarboxylic acid) (Chemical bonds)

NEGREYEV, V.F.; GADZHIYEVA, R.G.; SINITSYNA, Yu.Ye.; Prinimali uchastiye: ZEMSKOVA, L.N.; ALEKPEROVA, Yu.A.

Selecting the protective coating system for hydraulic engineering structures operated in seawater. Lakokras.mat. i ikh prim. no.2: 40-44 '64. (MIRA 17:4)

ZEMSKOVA, L.N.

NEGREYEV, V.F., ZEMSKOVA, L.N.

Corrosion protection in offshore oil fields. Azerb.neft.khoz.35 no.9:44-45 S '56. (MLRA 9:12)
(Oil well drilling, Submarine) (Corrosion and anticorrosives)

ZEMSKOVA, L.N.

GADZHIYEVA, R.G.; ZEMSKOVA, L.N.

Paint for protecting marine structure piling. Azerb.neft.khoz. 36 no.3:42-43 Mr '57. (MLRA 10:5)
(Corrosion and Anticorrosives)

GADZHIYEVA, R.G.; ZEMSKOVA, L.N.; MIRZOYEV, G.B.

Apparatus for studying the stability of lacquer-paint coatings in sea water. Lakokras. mat. i ikh prim. no.3:56-57 '61. (MIRA 14:6)

(Protective coatings--Testing)

ZEMSKOVA, L.V.; ZARITSKIY, L.A., professor, zaveduyushchiy.

Cylind roma of the trachea. Vest.oto-rin. 15 no.4:87 Jl-Ag '53.
(MLRA 6:9)

1. Klinika bolezney ukha, gorla i nosa Kiyevskogo meditsinskogo stomatologicheskogo instituta, na baze 3-y ob"edinennoy klinicheskoy bol'nitsy Kiyeva.
(Trachea--Tumors)

MELAMED, S.G.; ZEMSKOVA, M.G.

Atlas of spectral lines of rare earth elements (for DFS-3 and DFS-13 spectrographs). Izv. AN SSSR. Ser. fiz. 26 no.7:970-971 Jl '62. (MIRA 15:8)

(Rare earths—Spectra)

ZEMSKOVA, M.G.

PHASE I BOOK EXPLOITATION SOV/4443

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Metody opredeleniya primesey v chistykh metallakh (Methods of Determining Admixtures In Pure Metals) Moscow, 1960. 411 p. (Series: Its: Trudy, 12) 3,500 copies printed.

Resp. Eds.: A.P. Vinogradov, Academician, and D.I. Ryabchikov, Doctor of Chemical Sciences; Ed. of Publishing House: M.P. Volynets; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is intended for chemists, metallurgists, and engineers.

COVERAGE: The articles describe methods for detecting and determining various admixtures and their traces in pure metals. Also discussed are many chemical, physicochemical, electrochemical, spectrochemical and luminescence methods of analyzing materials of high purity. The editors state that these methods have been developed within the last five or six years by various Soviet scientific institutes, and are now widely used in research and factory laboratories of the Soviet Union. No personalities are mentioned. References, mostly Soviet, accompany each article.

Card 2/9

MELAMED, Sh.G.; RUSANOV, A.K.; ZEMSKOVA, M.G.

Determining tantalum and niobium in the sum of their pentoxides.
Trudy Kom. anal. khim. 12:65-70 '60. (MIRA 13:8)
(Tantalum oxide) (Niobium oxide)

LIVSHITS, TS.A. [Livshyts, TS.A.], kand.med.nauk; ZEMTSOVA, N.O. ; FRANZHOLI, N.N.; SHVABOVSKIY, V.A. [Shvabovs'kyi, V.A.]

Intraosseous drip infusion of saline solutions for infants. Ped., akush. i gin. 19 no.3:28-29 '57. (MIRA 13:1)

1. L'vovskiy nauchno-issledovatel'skiy institut okhrany materinstva i detstva (direktor - I.D. Yashchuk) na baze Oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - I.A. Karagodin).
(INJECTIONS, SALINE)

BOBKOVA, T.P., prepodavatel' kursov kroyki i shit'ya; GURBO, A.I., prepodavatel' kursov kroyki i shit'ya; ZHIVAYEVA, Ye.I., prepodavatel' kursov kroyki i shit'ya; ZEMSKOVA, O.V., prepodavatel' kursov kroyki i shit'ya; LYSENKO, A.V., prepodavatel' kursov kroyki i shit'ya; MARTOPLYAS, L.V., prepodavatel' kursov kroyki i shit'ya; MARTYNOVA, F.V., prepodavatel' kursov kroyki i shit'ya; PANOVA, V.P., prepodavatel' kursov kroyki i shit'ya; POMINOVA, M.G., prepodavatel' kursov kroyki i shit'ya; RYZHICHKINA, M.I., prepodavatel' kursov kroyki i shit'ya; SYCHEVA, T.A., prepodavatel' kursov kroyki i shit'ya; FILANOVICH, O.F., prepodavatel' kursov kroyki i shit'ya; BRUNEVSKAYA, M., red.; TRUKHANOVA, A., tekhn. red.

[Practical handbook on garment cutting and sewing] Prakticheskoe posobie po kroike i shit'iu. 4. izd. Minsk, Gos.izd-vo BSSR Red. nauchno-tekhn.lit-ry, 1961. 607 p. (MIRA 14:12)

1. Misnskiy Okruzhnoy Dom ofitserov im. K.Ye.Voroshilova i klub im. F.E.Dzerzhisnkogo (for all except Brunevskaya, Trukhanova).
(Dressmaking—Pattern design) (Sewing)

28-58-3-27/39

AUTHORS: Kazovskiy, Ye.Ya., Zemskova, P.M., and Mytarev, A.M., Engineers

TITLE: Standardization in the Plant "Elektrosila" (Normali zavoda "Elektrosila")

PERIODICAL: Standartizatsiya, 1958, Nr 3, 73-76 (USSR)

ABSTRACT: A general review of normalization work at the "Elektrosila" Plant is given. The Bureau of Normalization and Standardization (BNS) of the plant plans the work and makes out the drawings and specifications. The plant's norms have about 300 subcribers, at the plant itself and at other enterprises. Some of the subscribers get only certain "knigi normaley" (Standardization books). These books are numbered from 1 to 10; the equipment groups are designated by letters. Book Nr 1 contains recommendations for technical documents, design elements (tolerances, threads, etc.), conventional signs, indications for designers, and organizational information. Book Nr 2, contains the norms for materials. Book Nr 3, the ones for mechanical parts; Book Nr 4 is for electrical parts. Normalization started at "Elektrosila" as early as 1925. The article includes information on the numbers of various norms in use at the plant. The authors point out that the BNS needs methodical regulations for calculating the financial aspects of standardization and suggests special

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Standardization in the Plant "Elektrosila" 28-58-3-27/39

funds for its implementation as well as a payment system that would be an incentive to the staff.

Card 2/2 1. Industrial plants--Standards

KAZOVSKIY, Ye.Ya.; MYTAREV, A.S.; ZEMSKOVA, P.M.

Factory standardization and its effectiveness. Elektrosila no.19: 37-47 '60. (MIRA 15:2)
(Electric equipment industry--Standards)

KAZOVSKIY, Ye.Ya., inzh.; ZEMSKOVA, P.M., inzh.; MYTAREV, A.M., inzh.

Standardization at the "Elektrosila" Plant. Standartizatsiia 22 no.3:73-76 My-Je '58. (MIRA 11:7)
(Standards, Engineering)

ZEMSKOVA, YE. I.

SVENTSITSKIY, Ye.I.; LULOVA, N.I.; TARASOV, A.I.; ZEMSKOVA, Ye.I.

Thermochromatographic method for the analysis of hydrocarbon gases. Zav. lab. 22 no.12:1399-1403 '56. (MLRA 10:2)

(Chromatographic analysis)
(Hydrocarbons)

TARASOV, A.I.; LULOVA, N.I.; KUDRYAVTSEVA, N.A.; ZEMSKOVA, Ye.I.

Chromatographic gas analyzer for laboratories. Izm.tekh. no.8:47-49 Ag '60. (MIRA 13:9)

(Gases—Analysis)

MOROZOVA, O.Ye.; ZEMSKOVA, Z.K.; OSITYANSKAYA, L.Z.; KISLINSKIY, A.N.; PETROV, Al.A.

Part 2: Catalytic dehydroisomerization of alkylcyclopentanes. Neftekhimiia 2 no.5:676-680 S-O '62. (MIRA 16:1)

1. Institut geologii i razrabotki goryuchikh iskopayemykh. (Cyclopentane) (Dehydrogenation)

SEVEROV, V.S. (Moskva, ul. 6-go kilometra, d.2, korp. 2, kv.17); UVAROVA, O.A.; ZEMSKOVA, Z.S.; YANCHEVSKAYA, A.A.; DUBROVSKIY, A.V.

Plasmocytomas of the lung. Vestn. khir. Grekov. 90 no.4:14-17 Ap'63 (MIRA 17:2)

1. Iz khirurgicheskoy kliniki (zav. - prof. L.K.Bogush), patomorfologicheskoy laboratorii (zav. - prof. V.I.Puzik) Instituta tuberkuleza AMN SSSR.

UVAROVA, O.A.; ZEMSKOVA, Z.S.

Healing processes in experimental tuberculosis during the use of preparations of the second series. Probl. tub. 41 no.8:56-62 '63. (MIRA 17:9)

1. Iz patomorfologicheskoy laboratorii (zav. - prof. V.I.Puzi') TSentral'nogo instituta tuberkuleza (dir. - deystvitel'nyy chlen AMN SSSR prof. N.A.Shmelev) Ministerstva zdravookhraneniya SSSR.

ZEMSKOVA, Z.S.; SERGEYEV, V.V.

Phthivazide therapy of experimental tuberculosis caused by phthivazide-resistant mycobacteria tuberculosis. Probl. tub. no.2:67-71 '64.
(MIRA 17:12)

1. Patomorfologicheskaya (zav. - prof. V.I.Pucik) i mikrobiologicheskaya (zav. - prof. A.I.Kagramanov) laboratorii TSentral'nogo instituta tuberkuleza Ministerstva zdravookhraneniya SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.A.Shmelev), Moskva.

GRIGORYAN, V.G.; ZEMSKOVA, Z.S.; LESNAYA, A.A. (Moskva)

Histochemical study of succinic dehydrogenase in tuberculosis. Arkh. pat. 26 no.3:35-39 '64. (MIRA 18:12)

1. Laboratoriya patofiziologii (zav. - prof. G.Ye.Platonov), laboratoriya patomorfologii (zav. - prof. V.I.Puzik) TSentral'nogo instituta tuberkuleza (direktor - deystvitel'nyy chlen AMN SSSR prof. N.A.Shmelev) Ministerstva zdravookhraneniya SSSR.

UTKIN, V.V., kand. med. nauk; ZEMSKOVA, Z.S., kand. med. nauk

Healing process in tuberculosis in monkeys treated with cycloserine. Prob. tub. no.1:69-74 '65. (MIRA 18:12)

1. I terapevticheskoye otdeleniye (zav.- deystvitel'nyy chlen AMN SSSR prof. N.A. Shmelev) i patomorfologicheskaya laboratoriya (zav.- prof. V.I. Puzik) TSentral'nogo instituta tuberkuleza Ministerstva zdravookhraneniya SSSR, Moskva.

KARPOV, N.A., kand.tekhn.nauk; BLEKHMAN, I.I., kand.fiz.-matem.nauk, retsenzent; ZEMSKOY V.D., kand.tekhn.nauk, retsenzent; YELISEYEV, V.V., inzh., retsenzent; ORLOVA, I.A., inzh., red.; VOROTNIKOVA, L.F., tekhn.red.

[Light vibratory machinery for track maintenance and repair; theory, design, construction, and testing] Legkie vibratsionnye putevye mashiny; teoriia, raschet, konstruirovanie i ispytaniia. Moskva, Vses.izdatel'skopoligr. ob"edinenie M-va soobshcheniia, 1962. 311 p. (Moscow, Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.245). (MIRA 16:2)

(Railroads--Equipment and supplies) (Vibrators)

3(4)
AUTHOR: Zemtsev, A. S.

SOV/6-59-3-3/16

TITLE: The Sighting Point Used in the Moscow Aerogeodetic Center (Vizirnaya tsel', primenyayemaya v Moskovskom AGP)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 3, pp 22-25 (USSR)

ABSTRACT: In the Moscow AGP a new "sighting point" was constructed by the staff concerned with triangulation work, under the participation of the Engineers Yu. A. Aladzhalov, M. A. Aleksandrov, and others. The observation results obtained by the aid of this instrument are not inferior to those yielded by the sighting cylinders described in the triangulation norms. The advantages offered by the "sighting point"are described here. It allows the phase influence during illumination at various daytimes to be diminished and accuracy in observation is considerably higher. The shaft width of the instrument is visible not as a point through the tube, but as a straight segment. Moreover, the shaft is two-colored: black and white. If it is difficult to direct the tube to the black belt of the shaft, sighting is directed to the white part. Sometimes both parts, the black and white belt, are used. Dimensions and colors of the shaft allow a high accuracy in sighting the point. The

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method of Engineer G. A. Krotkov of the Moscow AGP is mentioned. It is a method of sighting by the aid of a shortened perpendicular thread. The image of the "sighting point" visible in the tube is not covered by the thread, as only the end of the black-colored part is covered by the end of the thread. Also as regards the determination of the reduction elements, the sighting point built in the Moscow AGP offers certain advantages, as compared to the sighting cylinder. Differences occurring in observations with the latter are virtually eliminated, as always one and the same point - the central point of the shaft cross section along the white belt - is projected onto the centering sheet. In conclusion, the construction procedure of both types of sighting instruments is briefly described. The construction of the sighting shaft mentioned is relatively simple: it will always be possible to find a tree with a straight trunk in the Taiga. There are 3 figures.

ZEMTSEV, A.S.

Marking fixed points in mountain taiga regions. Geod. i kart. no. 11:24-32 N '60. (MIRA 13:12)
(Surveying)

86659

S/006/60/000/011/001/004
B012/B067

9,5300

AUTHOR: Zemtsev, A. S.

TITLE: Experience Gathered in Marking Fixed Points in Mountainous Taiga Areas

PERIODICAL: Geodeziya i kartografiya, 1960, No. 11, pp. 24-32

TEXT: At the Moskovskoye aerogeodezicheskoye predpriyatiye (Moscow Aerogeodetic Service) investigations were made for the first time in 1959 to compile a map on a scale of 1 : 25,000 by using markings and aerial photographs on two scales. Also the most appropriate methods of marking were studied. The terrain to be surveyed was a mountainous taiga with marked mountain chains and deep and narrow valleys. Absolute altitudes were 1400-1800 m, relative altitudes 500-1000 m. The height of trees on the mountain slopes and in the deeper-lying parts was 15-25 m, and 6-10 m on peaks and rocky ground. 1288 fixed points were to be established on a total area of about 11,000 km^2. 560 of them were marked. The aerial photographs were taken in 1959 and 1960. On the basis of the experience gained, the following was stated: In a wooded terrain with 15 m high trees,

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86659

Experience Gathered in Marking Fixed Points in Mountainous Taiga Areas

S/006/60/000/011/001/004
B012/B067

fixed points marked by cross-shaped woodcuttings could be discerned most distinctly on aerial photographs. Woodcuttings of an area of 25 by 20 m appeared as white rhombic spots of blurred outlines. Dimensions of 10 by 30 m and 15 by 30 m are recommended for cross-shaped woodcuttings. An angular woodcutting 30 by 15 m is recommended for sections covered with shrubs. Circular or square markings were not recommended. Wooden signs fastened to trees could not be discerned on aerial photographs. Stone pyramides could hardly be discerned. Also aluminum or canvas signs proved inadequate. Birch trunks arranged in squares, however, could be distinctly discerned on aerial photographs. In sections where tree signs were set up very accurate drawings must be made with measurements until the characteristic points. Generally, it is recommended to clear carefully the places at which markings are to be made, to keep to the fixed measures and shapes, and to attach the fixed points exactly to peaks and turning points of the relief. There are 5 figures and 2 tables.

Card 2/3

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S/006/60/000/011/001/004
B012/B067

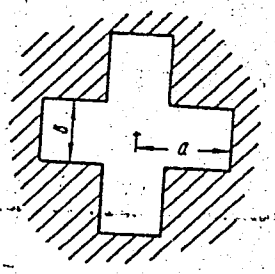


Рис. 1.

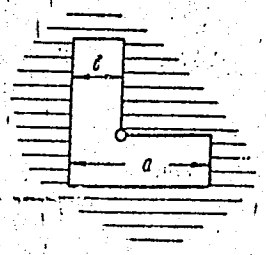


Рис. 2

Card 3/3

ZEMTSEV, Piotr Ivanovich, tsvetovod-lyubitel' (Moskovskaya oblast')

Amazing flowers. IUn.nat. no.4:8-9 Ap '59. (MIRA 12:3)
(Phlox)

VELIK INOV, N. (Chelyabinsk); ZEMTSOV, A.; KAZANTSEV, B. (Leningrad)

Electronic signal light switches. Radio no.4:50-51 Ap '64.
(MIRA 17:9)

GRIGOR, G.G. [deceased]; ZEMTSOV, A.A.

Division of Western Siberia into natural regions. Vop. geog. no.55: 82-90 '61. (MIRA 15:1)
(Siberia, Western--Physical geography)

MARUSENKO, Yakov, Il'ich; ZEMTSOV, Aleksey Anisimovich; SEMLYANSKAYA, Lidiya Pavlovna; PANKOV, Arkadiy Mikhaylovich; MININ, Nikolay Kondrat'yevich; MORDOVINA, L.G., tekhn. red.

[Hydrography of Western Siberia] Gidrografiia Zapadnoi Sibiri. Tomsk, Izd-vo Tomskogo univ. Vol.1. [General characteristics of waters] Obshchaia kharakteristika vod. 1961. 169 p.
(MIRA 14:11)

(Siberia, Western—Hydrography)

ZEMTSOV, A.A., dots., red.

[Glaciology of the Altai] Gliatsiologiia Altaia. Tomsk. No.3. 1964. 253 p. (MIRA 18:3)

1. Tomsk. Universitet.

ZEMTSOV, A.A.

Deep-lying formations of permafrost rocks in Western Siberia.
Izv.AN SSSR.Ser.geog. no.4:89-93 Jl-Ag '60.
(MIRA 13:7)

1. Tomskiy gosudarstvennyy universitet.
(Siberia, Western--Frozen ground)

ZEMTSOV, A. A. Cand Geog Sci -- (diss) "Quaternary deposits and geomorphology of the basins of the rivers Taz and Turukhan." Tomsk, 1958. 14 pp (Min of Higher Education USSR. Tomsk State Univ im V. V. Kuybyshev), 150 copies. List of author's works, pp 14 (13 titles) (KL, 52-58, 99)

ZEMTSOV, A.A.

Distribution of many-year frozen rocks in Western Siberia. Nauch. dokl. vys. shkoly; geol.-geog. nauki no.3:190-194 '58. (MIRA 12:1)

1.Moskovskiy universitet, geologicheskiy fakul'tet, kafedra merzlotovedeniya.
(Siberia, Western--Frozen ground)

ZEMTSOV, A.A.

Some data on the mineralogical composition of sediments in Mesocenozoic basins of the Taz and Turukhan Rivers. Nauch.dokl.vys. shkoly; geol.-geog.nauki no.1:105-112 '59. (MIRA 12:6)

1. Tomskiy universitet, geologo-geograficheskiy fakul'tet, kafedra obshchey geografii.
(Taz Valley--Mineralogy)
(Turukhan Valley--Mineralogy)

ZEMTSOV, A. A.

Permanently frozen ground in the flood plain of the Yenisey Valley. Trudy Inst. merzl. AN SSSR 19:72-74 '62.
(MIRA 16:1)

(Yenisey Valley--Frozen ground)

ZEMTSOV, A.A.

Geologic and geomorphologic study of the Vakh-Taz interfluve.
Trudy TGU 147:57-70 '57. (MIRA 16:5)

1. Kafedra obshchey geografii Tomskogo gosudarstvennogo universiteta imeni V.V.Kuybysheva.
(Vakh Valley--Geology) (Taz Valley--Geology)

ZEMTSOV, A.A.

New data on frozen ground in Western Siberia. Trudy TGU 147:71-72 '57. (MIRA 16:5)

1. Kafedra obshchey geografii Tomskogo gosudarstvennogo universiteta imeni Kuybysheva.
(Siberia, Western—Frozen ground)

ZEMTSOV, A.B.

Automatic machine for incising grooves on tubular diamond cutters.
Opt.-mekh.prom. 25 no.6:42-45 Je '58. (MIRA 11:10)
(Diamond, Industrial) (Machine tools)

ZEMTSOV, A. B.

USSR/Physics - Crystallography, Deformation 1 Aug 53

"Complex Manifestation of Plastic Deformation of Single-Crystals," A. B. Zemtsov, M. V. Klassen-Neklyudova and A. A. Urusovskaya, Inst of Crystallography of Acad Sci USSR

DAN SSSR, Vol 91, No 4, pp 813-816

Special phenomena occurring at fast compression of solid solution of thallium bromide and Tl iodide were revealed by Zemtsov. Plastic deformation was followed by peculiar shifts within the single-crystal depending

272T89

on direction of compression. Results are shown on photographs and schematic diagrams. Presented by Acad A. F. Ioffe 13 Jun 53.

ZEMTSOV A.B.

VITOVSKIY, B.V.; ZEMTSOV, A.B.

Isothermic-surface fusion crystallization outside the heated zone.
Trudy Inst.krist. no.9:349-352 '54. (MLRA 7:11)
(Crystallography)

MERKIN, A.P.; FILIN, A.P.; ZEMTSOV, D.G.

Formation of the macrostructure of cellular concrete. Stroi.mat. 9 no.12:10-12 D '63. (MIRA 17:3)

ZIL'BERFARB, P.M., inzh.; ZEMTSOV, D.G., inzh.; VAYSFEL'D, L.D., inzh.

Effect of some technical factors on the properties of silicate tile. Sbor. trud. ROSNIIMS no.20:90-97 '61. (MIRA 16:1)
(Sand-lime products) (Tile)

ZEMTSOV, G.M., prof.

Tomography in the diagnosis of diseases of the pharynx and larynx. Vest. oto-rin. 25 no.4:5-11 Jl-Ag '63. (MIRA 17:1)

1. Iz rentgenologicheskogo otdela (zav. - prof. G.M. Zemtsov) Gosudarstvennogo nauchno-issledovatel'skogo instituta bolezney ukha, nosa i gorla (dir. - prof. N.A. Bobrovskiy), Moskva.

ZEMTSOV, Grigoriy Mikhaylovich; VOZNESENSKIY, N.L., red.

[X-ray diagnosis of inflammatory diseases of the middle ear] Rentgenodiagnostika vospalitel'nykh zabolevanii srednego ukha. Moskva, Meditsina, 1965. 92 p. (MIRA 18:2)

ACCESSION NR: AP4042845 S/0142/64/007/003/0283/0294

AUTHOR: Neyman, M. S. (Professor); Zemtsov, G. P.

TITLE: Simple method of testing discrete-operation components at high clock frequencies

SOURCE: IVUZ. Radiotekhnika, v. 7, no. 3, 1964, 283-294

TOPIC TAGS: computer component, computer component testing, computer reliability, computer component reliability

ABSTRACT: This method is suggested for testing the reliability of a trigger, logical element, shift register, etc.: The pulse train from the component being tested is applied to a detector and then to a (simple or superheterodyne) radio receiver. After the detection, an amplification at the clock frequency, or its harmonic, and then a second detection may be arranged. An experimental device (see Enclosure 1) used for testing an r-f pulse trigger consisted of the trigger

Card 1/3

ACCESSION NR: AP4042845

proper Tr, a detector D for isolating the r-f-pulse envelope, a superheterodyne receiver R tuned to the clock frequency, and an indicator I which served to measure the voltage across the receiver detector. The trigger included a tunnel diode with an additional inductance and coupling capacitors. The effects of the supply voltage on the reading of the indicator, for various modulation voltages and at clock frequencies of 70, 130, 140, and 150 Mc, were determined experimentally (curves supplied). It was found that the tested tunnel-diode trigger reliably operated at clock frequencies up to 130 Mc, with a carrier-frequency to clock-frequency ratio of 13.5. The method permits the testing of components not only for flip-flop operation but also for cycles such as: 101010, 100100100, 110110110, etc. Orig. art. has: 12 figures.

ASSOCIATION: none

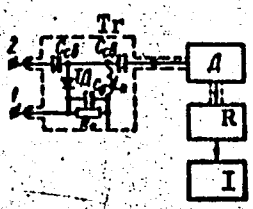
SUBMITTED: 25Mar63 ENCL: 01

SUB CODE: DP NO REF SOV: 003 OTHER: 000

Card 2/3

ACCESSION NR: AP4042845

ENCLOSURE: 01



A trigger testing scheme

Card 3/3

ACCESSION NR: AP4012361 S/0142/63/006/006/0648/0657

AUTHOR: Zemtsov, G. P.

TITLE: Investigation of amplitude flipflop using a circuit with nonlinear p-n junction capacitance

SOURCE: IVUZ. Radiotekhnika, v. 6, no. 6, 1963, 648-657

TOPIC TAGS: Flipflop, multivibrator, trigger circuit, amplitude flipflop, nonlinear capacitance, nonlinear diode junction capacitance logical circuit elements, and element, or element, not element, nor element, binary circuit element, junction capacitance

ABSTRACT: The possibility of realizing an amplitude flipflop by using a resonant circuit with the nonlinear p-n junction capacitance of a D7-G semiconductor diode at relatively low frequencies and high pumping amplitudes is investigated. Several methods of triggering the flipflop by means of an external signal were tested: application of a video pulse to the diode bias circuit, application of a periodic signal with frequency lower than the pumping frequency to the bias

Card 1/3

ACCESSION NR: AP4012361

circuit, variation of the pumping amplitude, and triggering of the flip-flop from a stable state with low amplitude to a stable state with high amplitude. It is shown that such circuits can be used for the transmission of binary information in digital circuitry and for the realization of logical NOT, NOR, AND, and OR elements. Orig. art. has; 18 figures and 7 formulas.

ASSOCIATION: Moskovskiy aviatsionny*y institut (Moscow Aviation Institute)

SUBMITTED: 25Mar63 DATE ACQ: 14Feb64 ENCL: 01

SUB CODE: GE, SD NO REF SOV: 003 OTHER: 001

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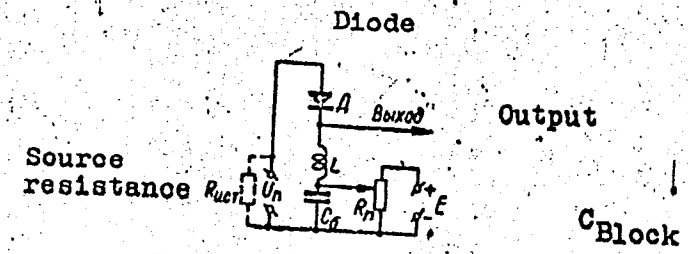
ACCESSION NR: AP4012361

ENCLOSURE: 01



Experimental flipflop circuit

Card 3/3

Name: ZEMTSOV, Grigoriy Mikhaylovich

Dissertation: The role of the X-ray method of examination in cases of cancerous diseases of the throat and larynx

Degree: Doc Med Sci

Affiliation: State Sci Res Inst of Ear, Throat and Nose of the Min of Health RSFSR

Defense Date, Place: 14 May 56, Council of State Sci Res Inst of Roentgenology and Radiology

Certification Date: 16 Mar 57

Source: BMVO 13/57

ZEMTSOV, Grigoriy Mikhaylo, prof.; VOLKOV, Yu.N., red.; POGOSKINA, M.V., tekhn. red.

[X-ray diagnosis of cancerous tumors of the pharynx and larynx] Rentgenodiagnostika rakovykh opukholei glotki i gortani. Moskva, Gos. izd-vo med. lit-ry Medgiz, 1960. 147 p. (MIRA 14:9)
(PHARYNX—CANCER) (LARYNX—CANCER) (NECK—RADIOGRAPHY)

ZEMTSOV, G.M.; YUNINA, A.I.

Peculiarities of external respiration in tracheotomy patients. Trudy gos.nauch.-issl.inst.ukha, gorla i nosa. 6:341-357 '55. (MIRA 12:10)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa i Klinicheskoy ordena Lenina bol'nitsy imeni S.P.Botkina.

(RESPIRATION) (TRACHEA--SURGERY)

ZEMTSOV, G.M., kand.med.nauk; AMDURSKAYA, TS.A., kand.med.nauk

Clinical aspects of the course of submucous cancers of the pharynx and of the space below the vocal cords. Trudy gos. nauch.-issl.inst.ukha, gorla i nosa. 6:358-361 '55.
(MIRA 12:10)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa i Klinicheskoy ordena Lenina bol'nitsy imeni S.P.Botkina.

(PHARYNX--CANCER)

ZEMTSOV, G.M.

REYNBERG, S.A., prof., zasluzhennyy deyatel' nauki; ZEMTSOV, G.M., doktor med.nauk

New methods of X-ray diagnosis of parathyroid adenomas. Khirurgiia 34 no.1:37-43 Ja '58. (MIRA 11:3)

1. Iz kafedry rentgenologii i radiologii TSentral'nogo instituta usovershenstvovaniya vrachey (zav.-zasluzhennyy deyatel' nauki prof. S.A.Reynberg) i rentgenologicheskogo otdeleniya Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla, i nosa (zav.-doktor meditsinskikh nauk G.M.Zemtsov) na baze Moskovskoy gorodskoy ordena Lenina klinicheskoy bol'nitsy imeni S.P.Botkina.

(PARATHYROID GLAND, neoplasms,
x-ray diag. (Rus)

MARMORSHTEYN, S.Ya.; ZEMTSOV, G.M., zaveduyushchiy; CHESNOKOV, S.A., glavnyy vrach.

Roentgenographic test of live- and stillbrith. Vest.rent.i rad. no.2:62-64 Mr-Ap '53. (MLRA 6:6)

1. Rentgenovskoye otdeleniye Klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina (for Marmorshteyn, Zemtsov). 2. Klinicheskaya ordena Lenina bol'nitsa imeni S.P. Botkina (for Chesnokov). (Diagnosis, Radioscopic) (Stillbirth) (Obstetrics--Apparatus and instruments)

NEYMAN, M.S.; ZEMTSOV, G.P.

Study of the logic elements of an amplitude sampled-data control system. Izv. vys. ucheb.; radiotekh. 5 no.1:16-25 Ja-F '62. (MIRA 15:5)

1. Rekomendovana kafedroy Moskovskogo aviatsionnogo instituta imeni Sergo Ordzhonikidze.
(Automatic control)

37408

S/142/62/005/001/001/012
E140/E435

9.7100

AUTHORS: Neyman, M.S., Zemtsov, G.P.

TITLE: An investigation of logical elements for digital automata using amplitude script

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Radiotekhnika. v.5, no.1, 1962, 16-25

TEXT: The authors describe an experimental study of circuit elements for carrier-amplitude logic. "For greater simplicity and clarity the first experiments were carried out using vacuum triodes and a relatively low frequency of oscillation". The system described consists of stiff-feedback oscillators with a heavy fixed grid bias which maintains them cut-off except when triggered into oscillation by the simultaneous presence of a high-frequency input and a reduction of the bias. The latter is used to control the clock relations. The bias, resonant frequencies and coupling arrangements are adjusted to permit the following logical operations: (with two inputs only) AND, OR, EXCLUSIVE OR, and (with one input only) NOT (negation). The carrier frequency of the experimental elements was 750 kcs, the clock frequency 50 cps (sic). The circuits are not unilateral,

Card 1/2

ACC NR: AP6031626 SOURCE CODE: UR/0108/66/021/009/0071/0073

AUTHOR: Zemtsov, G. P. (Active member)

ORG: Scientific-Technical Society of Radio Engineering and Telecommunications im. A. S. Popov (Nauchno-tekhnicheskiye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Logic elements based on AD-type flip-flops

SOURCE: Radiotekhnika, v. 21, no. 9, 1966, 71-73

TOPIC TAGS: logic circuit, flip flop circuit, computer circuit

ABSTRACT: Logic circuits based on AD-type (i.e., utilizing a pair of tunnel diodes) dynamic flip-flops are described. Typical of these circuits is the dual-input NOR

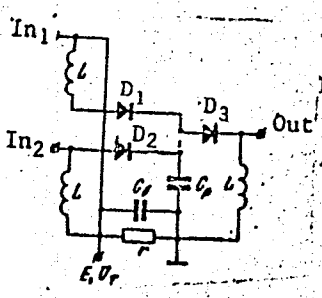


Fig. 1. A two-input NOR gate

Card 1/3 UDC: 621.374.3

Table 1. Performance characteristics of various logic circuits

Logic Circuit	Diode type	Output Circuit frequency GH_2	Clock Frequency Mc	Bias Voltage v	Peak Current percent difference	Independent bias voltage tolerances %
OR	ZIZOIV	1,1	50	$U_T = 0,1$ $E = 0,2$	5	$\frac{\Delta U_T}{U_T} = \pm 12$ $\frac{\Delta E}{E} = \pm 4$
NOR	ZIZOIV	0,8	40	$U_T = 0,04$ $E = 0,2$	5	$\frac{\Delta U_T}{U_T} = \pm 12$ $\frac{\Delta E}{E} = \pm 14$
NOT	ZIZOIV	0,9	40	$U_T = 0,04$ $E = 0,2$	5	$\frac{\Delta U_T}{U_T} = \pm 11$ $\frac{\Delta E}{E} = \pm 5$

ACC NR: AP6031626

gate shown in Fig. 1. The design of this circuit must insure that the peak current of the D_3 tunnel diode is always less than the sum of the peak currents of D_1 and D_2 diodes. Other parameters for this circuit are: L = 5 nhy, C_D = 40 pf, and r = 10 ohms. Two other circuits are described, the INHIBIT and the OR, both of which may act as AND circuits if majority threshold logic is used, but this operation places very stringent tolerances on the peak current of the tunnel diodes. The NOR, OR, and NOT logic circuits were tested using a 40--50 Mc sinnusoidal clock signal. The test signals were derived from an AD3-type flip-flop, and the operation of the circuits was checked by observing their output envelopes on an S1-10 oscillograph. The results are summarized in Table 1 (E and U_T are the dc and sine bias supply components, respectively). Orig. art. has: 3 figures and 1 table.

SUB CODE: 09/ SUBM DATE: 21Jun65/ ORIG REF: 002/

Card 3/3

NEYMAN, M.S.; TELYATNIKOV, L.I.; ZEMTSOV, G.P.

Study of triggers and shift registers for amplitude-type sampled-data systems. Trudy MAI no.149:23-37 '62. (MIRA 15:12)
(Pulse techniques (Electronics))
(Electronic computers)

NEYMAN, M.S.; ZEMTSOV, G.P.

Study of logic elements for amplitude-type sampled-data systems.
Trudy MAI no.149:52-65 '62. (MIRA 15:12)
(Electronic computers)

NEYMAN, M.S.; ZEMTSOV, G.P.

Amplitude triggers using tunnel diodes. Radiotekhnika 18 no.1:40-47 Ja '63. (MIRA 16:2)

1. Deystvitel'nyye chleny Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova.
(Electric networks) (Pulse circuits)

31980
S/142/61/004/004/001/018
E192/E382

9,7500

AUTHORS: Neyman, M.S., Telyatnikov, L.I. and Zemtsov, G.P.

TITLE: Investigation of flip-flops and registers for the amplitude system of digital computing

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 4, no. 4, 1961, 388 - 397

TEXT: One of the authors analyzed in two earlier papers (Ref. 1 - Radiotekhnika, 1960, 15, no. 3, 7; Ref. 2 - -do- No. 10, 3) the general problems of designing digital-computing elements based on radio pulses instead of the usual video pulses. Such systems can use amplitude, frequency, phase and combined methods of recording and processing of information. Some experimental results of an investigation of the basic amplitude-type binary systems are described in the following. The elements of the flip-flops and registers are based on over-excited oscillators. The experimental oscillator was based on a vacuum tube, type 6Ж8 (6N8), with series supply in the grid and parallel supply in the anode circuit. The oscillator operated at a frequency of 7 Mc/s. One of the important

Card 1/6

Investigation of flip-flops....

characteristics of such an oscillator is its output voltage-amplitude U_g at the grid circuit as a function of the negative bias applied to the grid, with the anode voltage E_a as a parameter. A set of such control curves for various E_a is shown in Fig. 1b for the coupling coefficient $K = 1.8$ (coupling between anode and grid circuits). It is seen that, depending on the grid bias voltage, the oscillator can behave as a bistable element. On the basis of Fig. 1, it is possible to determine the width ΔE_g of the bistable zone for various anode voltages. It was also found experimentally that the amplitude of the oscillations was a loop-form function of the anode supply voltage. The width of the bistable zone as a function of the anode voltage is greater than the width as a function of the grid bias voltage. Changeover of the above type of flip-flop (switching circuit) can be effected by means of an external video pulse, radio pulse or both, provided the system operates within the bistable zone. If the triggering is

Investigation of flip-flops....

done by a radio pulse, this should produce forced oscillations in the system, whose amplitude should exceed a certain threshold level. Further, the radio pulse should transfer to the system an energy not less than $(1/2)CU^2$, where U is the amplitude of the threshold voltage and C is the equivalent capacitance of the oscillatory system. The fact that the amplitude-type flip-flop can be controlled either by a radio pulse or by changing its supply voltage can be taken into account in the design of a binary register with an amplitude system of information-storage. Triggering of the flip-flop by means of radio pulses makes it possible to transfer the "state" of a preceding flip-flop to the next unit, while by using video-pulse modulation at the supply side each flip-flop can be returned to its original state. In the case of triode flip-flops, the modulation can be effected at the anode as well as at the grid. The registers can be of the following three types, depending on the inter-coupling elements between the flip-flops; a) register with delay lines; b) register with two flip-flops in each stage and c) register with three flip-flops in each

Card 3/6

Investigation of flip-flops....

stage. The first flip-flop A is the fundamental element in the register of the second type, while the second trigger B forms the coupling element. The modulating voltage is applied to the fundamental and coupling elements in anti-phase. The modulating voltage is applied to the elements with a phase-shift of 120° in the case of a three-flip-flop register. A register element of the second type was investigated experimentally, the circuit diagram of the system being shown in Fig. 13. The potentiometers R_g in the circuit were used for setting the mean levels of the biases and the amplitudes of the modulating voltage for each of the oscillators. The lefthand-side oscillator was triggered by an external source, operating at 7 Mc/s. The righthand-side oscillator was triggered by radio pulses derived from the lefthand-side oscillator via the capacitances C_{CB1} and C_{CB2} and the diode connected in parallel. The diode was employed principally for directional decoupling of the system. The experiments showed that a satisfactory operation requires that the directional decoupling be at least 10. If the decoupling were lower, a spurious triggering of the lefthand-side oscillator

Investigation of flip-flops ....

by the righthand-side oscillator could take place. The above experiments confirmed the possibility of employing the amplitude-type binary switching circuits and registers as reliable computing elements.
There are 14 figures and 8 references: 4 Soviet-bloc and 4 non-Soviet-bloc. The four English-language references mentioned are: Ref. 3 - E. Goto - PIRE, 1959, 47, no. 8, 1304;
Ref. 4 - R.L. Wigington - PIRE, 1959, 47, no. 4, 516;
Ref. 5 - F. Sterzer - PIRE, 1959, 47, no. 8, 1317;
Ref. 6 - Transactions of IRE, 1959, EC-8, no. 3.

ASSOCIATION: Kafedra Moskovskogo aviatsionnogo instituta im. Sergo Ordzhonikidze (Department of Moscow Aviation Institute im. Sergo Ordzhonikidze)

SUBMITTED: December 6, 1960

Card 5/5

L 21289-66 EWT(1)/EWA(h)
ACC NR: AP6007152 SOURCE CODE: UR/0108/66/021/002/0045/0050

AUTHOR: Zemtsov, G. P. (Active member)

ORG: Scientific and Technical Society of Radio Engineering and Electrocommunication (Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Tunnel-diode r-f-pulse-height triggers with internal pulse rectification

SOURCE: Radiotekhnika, v. 21, no. 2, 1966, 45-50

TOPIC TAGS: tunnel diode, tunnel diode trigger

ABSTRACT: R-f-pulse-height triggers (RPT) may be switched with a frequency as high as 130 Mc but they require special selection and matching of individual tunnel diodes. As the characteristics of commercial tunnel diodes are widely spread, only a small percentage of the many available can be selected. To avoid this difficulty,

 UDC: 621.373.54

L 21289-66
ACC NR: AP6007152

their peak currents; (2) The maximum clock frequency for Soviet-made (ZIZ01V) tunnel diodes is about 50--60 Mc; the maximum working frequency is 35—40 Mc; (3) Under the above conditions, the RPT gain is 3.3 or better, which permits loading each trigger with three others; (4) The RPT circuits permit supply-voltage and clock signal variation of 4% and 8% respectively. Orig. art. has: 12 figures and 5 formulas. [03]

SUB CODE: 09/ SUBM DATE: 11May65/ ORIG REF: 003/ ATD PRESS: 4222

L 18459-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP6006383 SOURCE CODE: UR/0413/66/000/002/0115/0116

INVENTOR: Gol'berg, I. Ye.; Zemtsov, G. P.; Telyatnikov, L. I. 52

ORG: none B

TITLE: An rf pulse-amplitude flip-flop based on tunnel diodes. Class 42, No. 178169 164/14

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 115-116

TOPIC TAGS: flip flop circuit, tunnel diode, rf pulse, logic element

ABSTRACT: This Author's Certificate introduces: 1. An rf pulse-amplitude flip-flop based on tunnel diodes. To provide decoupling between the input and output and to simplify the design of logic circuits, the device contains two inductances which make up two tank circuits, two series-connected tunnel diodes in the supply circuit, and a blocking capacitor for high frequency decoupling of the tank circuits. 2. A modification of this flip-flop which contains a single inductance connected between the input and output for high frequency decoupling of the tunnel diodes.

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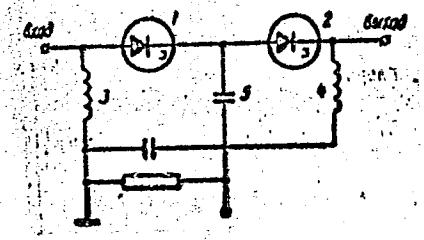

1 and 2 - tunnel diodes; 3 and 4 - tank circuit inductances; 5 - blocking capacitor.

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Card 2/2 MJS

ZEMTSOV, L. (Ufa); LAKHOVA, V. (Ufa)

We use hidden potentialities. Sov. torg. 36 no.11:29 N '62.
(MIRA 16:1)

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ZEMTSOV, M.A.

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